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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,295	01/18/2002	Behzad Mirzayi	12,339	8376

7590 03/10/2004

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EXAMINER

BARRY, CHESTER T

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,295

Applicant(s)

MIRZAYI ET AL.

Examiner

Chester T. Barry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Claims 1 – 12 are rejected under 35 USC Sec. 112(2) for failing to particularly point out and distinctly claim the invention.

Claim 1 appears to require that the granulated activated charcoal is in pellet form.

Claim 2 implies that the charcoal can have one of the following non-pellet forms: a mat or mats, a fabric, a support matrix, or an adsorption media. Accordingly, the scope of claims 1 and 2 cannot be ascertained with a reasonable degree of precision.

Claim 1 lacks antecedent basis for the term "said substances" recited in claims 3, 5, and 6. It is unclear whether "said substances" in claim 3 refers to the fluid, the charcoal, the stream of water, the water, the nutrients, the microbes, the matrix, the contaminant, or to some other unspecified substance.

Per claim 3, it is unclear whether the "treatable aqueous fluid" is the "stream of water" recited in claim 1, or whether it is a separate and distinct fluid stream.

Per claim 5, which depends from claim 3, it is unclear whether "the fluid" is the "stream of water" recited in claim 1, the "treatable aqueous fluid" recited in claim 3, the "treated fluid" recited in claim 3, or some other separate and distinct previously unspecified fluid.

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Per claim 6, which depends from claim 5, it is unclear whether "said fluid" is the "stream of water" recited in claim 1, the "treatable aqueous fluid" recited in claim 3, the "treated fluid" recited in claim 3, or some other separate and distinct previously unspecified fluid.

Per claim 7, which depends from claim 1, it is unclear whether "said fluid" is the "stream of water" recited in claim 1, or whether it is a separate and distinct fluid stream.

Claim 1, clause (d), appears to require that there is an upstream seeding zone from which microbes are supplied in fluid flow to the downstream treatment zone. Claim 10 requires "a seeding zone upstream of [the plurality of] treatment zones." It is unclear whether the seeding zone recited in claim 1 is the very same seeding zone recited in claim 10, or whether claim 10 requires at least two seeding zones.

Per claim 11, it is unclear whether both a "stream of water" (as recited in claim 1) and a separate "waste water containing toxic contaminants" (as recited in claim 11) is required, or whether it is sufficient for claim 11 purposes that the "stream of water" recited in claim 1 contain toxic contaminants and that the stream of water be passed through the matrix to reduce "said contaminants."

Per claim 11, it is unclear whether "reduce said contaminants" means "reduce the concentration of said contaminants," or whether it means that the oxidation state of the contaminants be reduced (as opposed to oxidized).

In claim 12, the expression, "gas transported toxic" cannot be understood. Was "passing gas-transported toxic compounds" intended?

In claim 12, the term, "said contamination" lacks antecedent basis in claim 1. That is, it is unclear to what "contamination" applicant refers.

Insofar as method claim 13 is not limited to a method using granulated activated charcoal in pellet form, it is not drawn to the elected invention. Henceforth, applicant must indicate provide an indication that claim 13 is "withdrawn," i.e.,

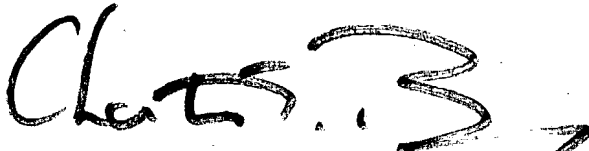
Claim 13 (withdrawn). The method of . . . .

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

A handwritten signature in dark ink, appearing to read "Chestert T. Barry", written over a horizontal line.

571-272-1152

**CHESTERT T. BARRY**  
**PRIMARY EXAMINER**